

IN THE CLAIMS:

The text of all pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (previously amended), (cancelled), (withdrawn), (new), (previously added), (reinstated - formerly claim #), (previously reinstated), (re-presented - formerly dependent claim #) or, (previously re-presented).

Please CANCEL claim 1-14, and ADD new claims 15-30 in accordance with the following:

1-14 (cancelled)

15. (new) A machine having a rotor mounted on a rotor shaft to rotate about a rotation axis, comprising:

a rotor external housing which is attached to the rotor shaft;

a winding comprising a winding former and a winding that is to be cooled, the external housing surrounding the winding former and the winding that is to be cooled;

a device which transmits torque between the winding former and the rotor shaft, the device being provided for at least one end of the winding former, the device comprising:

a pair of metal flange attachment parts, each having a mating surface; and

a rotationally symmetrical composite body composed of a plastic reinforced with fiber material, to connect the metal flanges, wherein the composite body comprises side parts and a center part integrally located between the side part, the side parts each having a funnel portion that widens away from the winding former, the center part being formed as a hollow cylinder, at least a portion of the center part extending freely between the attachment parts, wherein

the side parts each have a corrugated portion with a corrugated shape when seen in the circumferential direction,

the center part is largely uncorrugated,

the side parts are connected respectively, in an interlocking and power-transmitting manner, to the metal flange attachment parts, and

each side part of the composite body is detachably pressed against the mating surface of one attachment part, the mating surfaces of the attachment parts each having a shape that matches that of the respective side part; and a compression ring body detachably connected to each attachment part in a power-

transmitting manner, each compression ring body having a pressing surface with a shape matching that of a corresponding side part.

16. (new) The machine as claimed in claim 15, wherein the side parts having a uniform corrugated shape when seen in the circumferential direction.

17. (new) The machine as claimed in claim 15, wherein the side parts have a corrugated shape in the form of a sine wave or a circular arc when seen in the circumferential direction.

18. (new) The machine as claimed in claim 15, wherein the funnel portion of each side part has the corrugated shape.

19. (new) The machine as claimed in claim 15, wherein the side parts of the composite body each have an end section in the form of a hollow cylinder.

20 The machine as claimed in claim 19, wherein each end section has a corrugated shape.

21. (new) The machine as claimed in claim 15, wherein
outer portions of the center part of the composite body are pressed in an interlocking, power-transmitting manner against corresponding attachment parts by a respective compression ring body.

22. (new) The machine as claimed in claim 15, wherein
the side parts are joined to the center part at respective junctions, and
at least the majority of fibers in the fiber material extend without interruption over the junctions between the side parts and the center part.

23. (new) The machine as claimed in claim 15, wherein the fiber material of the composite body is formed of glass fibers or carbon fibers.

24. (new) The machine as claimed in claim 15, wherein the flange-like attachment parts are each provided with an end tooth system, which can engage in a corresponding tooth system

on the associated part of the winding former or of the side housing part of the rotor external housing which is connected to the rotor shaft part.

25. (new) The machine as claimed in claim 24, wherein the tooth system is designed to be self-centering.

26. (new) The machine as claimed in claim 15, wherein the flange-like attachment parts are made of a steel.

27. (new) The machine as claimed in claim 15, wherein the connection between each compression ring body and the respective attachment part is a screw connection.

28. (new) The machine as claimed in claim 15, wherein the winding to be cooled has conductors containing metallic low- T_c superconductor material or metal-oxide high- T_c superconductor material.

29. (new) The machine as claimed in claim 15, wherein the winding former is surrounded by a vacuum.

30. (new) The machine as claimed in claim 15, wherein the center part of the composite body is completely uncorrugated.